AMENDMENTS TO THE SPECIFICATION

Please amend the specification as indicated herein.

Please delete paragraph **[0148]** and replace it with the following rewritten paragraph:

[0148] A preferred detection method is allele specific hybridization using probes overlapping the polymorphic site and having about 5, 10, 20, 25, or 30 nucleotides around the polymorphic region. Examples of probes for detecting specific allelic variants of the polymorphic region located in intron X are probes comprising a nucleotide sequence set forth in any of SEQ ID NO. X. In a preferred embodiment of the invention, several probes capable of hybridizing specifically to allelic variants are attached to a solid phase support, e.g., a "chip." Oligonucleotides can be bound to a solid support by a variety of processes, including lithography. For example a chip can hold up to 250,000 oligonucleotides (GeneChip, Affymetrix). Mutation detection analysis using these chips comprising oligonucleotides, also termed "DNA probe arrays" is described e.g., in Cronin et al., HUMAN MUTATION 7:244 (1996) and in Kozal et al., NATURE MEDICINE 2:753 (1996). In one embodiment, a chip comprises all the allelic variants of at least one polymorphic region of a gene. The solid phase support is then contacted with a test nucleic acid and hybridization to the specific probes is detected. Accordingly, the identity of numerous allelic variants of one or more genes can be identified in a simple hybridization experiment. For example, the identity of the allelic variant of the nucleotide polymorphism of nucleotide A or G at position 33 of ~~Seq ID 1~~ (baySNP179) and that of other possible polymorphic regions can be determined in a single hybridization experiment.

Please delete paragraph **[0272]** and replace it with the following rewritten paragraph:

TABLE 2a

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING MASS SPECTROMETRY

[0272] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for preamplification of the genomic fragments (primers EF and ER) and for subsequent allele specific PCR of the SNP.

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
160	C195T	ER	gacgatgccttcagcacaCTTGGCTTGGAATAGAGA	1
160	C195T	EF	GACTATGCGGAGAAGATG	2
160	C195T	CF	gggacggtcggtagatCTGAGCTGTGAGAGGGGC	3
160	C195T	TF	gctggctcggtcaagaCTGAGCTGTGAGAGGGGT	4
1278	A168G	AF	gggacggtcggtagatGCCGGCCAGAGCAAGCTA	5
1278	A168G	EF	CACTACAGATAGAGGGGTG	6
1278	A168G	ER	GACGATGCCTTCAGCACAATTGAGATGACAGGTTGAG	7
1278	A168G	GF	gctggctcggtcaagaGCCGGCCAGAGCAAGCTG	8
1371	C507T	CR	gggacggtcggtagatGGCTCGGGACGATGGGAG	9
1371	C507T	EF	GACGATGCCTTCAGCACAGCCCACTCCTACCACAAG	10
1371	C507T	ER	GGGGACAGAGAGAAGCAA	11
1371	C507T	TR	gctggctcggtcaagaGGCTCGGGACGATGGGAA	12
1806	A201G	AF	gggacggtcggtagatTGGGCGTCCTGGTGGGCA	13
1806	A201G	EF	TCTTCGGGCTAACTCTTT	14
1806	A201G	ER	GACGATGCCTTCAGCACACTGTCACTCCAAACCTTCT	15
1806	A201G	GF	gctggctcggtcaagaTGGGCGTCCTGGTGGGCG	16
2178	C719T	CR	gggacggtcggtagatTGGCAAACACGTTCCAGG	17
2178	C719T	EF	GACGATGCCTTCAGCACAAGGAAATAGAAGGGGAGGA	18
2178	C719T	ER	CCTGTGAACTGCCTGAAC	19
2178	C719T	TR	gctggctcggtcaagaTGGCAAACACGTTCCAGA	20
2198	C548T	CF	gggacggtcggtagatGACAAATGCTTATGAAAC	21
2198	C548T	EF	GAAATAACTAGGCGTGGA	22
2198	C548T	ER	GACGATGCCTTCAGCACATGGGGAAAAATAACAAAG	23
2198	C548T	TF	gctggctcggtcaagaGACAAATGCTTATGAAAT	24
2214	A231T	AR	gggacggtcggtagatTTGGCTGCACTGCGAAGT	25
2214	A231T	EF	GACGATGCCTTCAGCACAAGGAAGGTGAAGGAGAGA	26
2214	A231T	ER	GTAGGCATTGTTTGGTATG	27
2214	A231T	TR	gctggctcggtcaagaTTGGCTGCACTGCGAAGA	28
2267	C490T	CR	gggacggtcggtagatATTCTGGGCACCACAGCCG	29

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
2267	C490T	EF	GACGATGCCTTCAGCACACTTCTGAGTGGGCGTTATTAC	30
2267	C490T	ER	GGTGGCCAAGGTCGTGCTG	31
2267	C490T	TR	gctggctcggtcaagaATTCTGGGCACCACAGCCA	32
3907	A194C	ER	gacgatgccttcagcacaAGTGGAGAGAGGATGTTTAG	33
3907	A194C	EF	GTCTTATGTAGACGCTTGG	34
3907	A194C	AF	gggacggtcggtagatTCCCCAGGGCGGGTAAGA	35
3907	A194C	CF	gctggctcggtcaagaTCCCCAGGGCGGGTAAGC	36
4564	A446G	EF	gacgatgccttcagcacaAACTCTGCTCCATATTCC	37
4564	A446G	ER	CTCCATCATCCTTTTACAC	38
4564	A446G	AR	gggacggtcggtagatACGGCTCCTATTCCCAGT	39
4564	A446G	GR	gctggctcggtcaagaACGGCTCCTATTCCCAGC	40
5569	A605G	ER	gacgatgccttcagcacaCCTCTGTTCCTTCCCTCT	41
5569	A605G	EF	AGTGTGGTCTCCGAATGT	42
5569	A605G	AF	gggacggtcggtagatTGGAGCATGGGAGCCACA	43
5569	A605G	GF	gctggctcggtcaagaTGGAGCATGGGAGCCACG	44
6872	A254G	EF	CATCAAGGCAGACCAA	45
6872	A254G	ER	GAAGGAGAGCAAAGGG	46
6872	A254G	AF	gggacggtcggtagatAAGATACCTAAATAACAA	47
6872	A254G	GF	gctggctcggtcaagaAAGATACCTAAATAACAG	48
8164	A251T	EF	CACAAAATACACCAACAA	49
8164	A251T	ER	CATTGATAAGGAATAAGGA	50
8164	A251T	AF	gggacggtcggtagatACATACGCACAAAAATTA	51
8164	A251T	TF	gctggctcggtcaagaACATACGCACAAAAATTT	52
8242	A251G	EF	AGACCCACATTCACACAC	53
8242	A251G	ER	TTACACGTCAGCTTCCTC	54
8242	A251G	AR	gggacggtcggtagatTTACACACACAGTTAGAT	55
8242	A251G	GR	gctggctcggtcaagaTTACACACACAGTTAGAC	56
8589	C378T	EF	gacgatgccttcagcacaGTTGTTTGGTTTGTTGTTTT	57
8589	C378T	ER	GCTTGGCTTCCTATGTCT	58
8589	C378T	CR	gggacggtcggtagatTAGCATCAATGCTGGGAG	59
8589	C378T	TR	gctggctcggtcaagaTAGCATCAATGCTGGGAA	60
10771	C64G	EF	gacgatgccttcagcacaCCAGGGAAGAGCAGAACC	61
10771	C64G	ER	TGTACGGGAAGAGGCAGA	62
10771	C64G	CR	gggacggtcggtagatAGGGTGACACAGGCCACG	63
10771	C64G	GR	gctggctcggtcaagaAGGGTGACACAGGCCACC	64
12399	A55G	EF	gacgatgccttcagcacaGTGTGTTTCGCAGGAGGA	65
12399	A55G	ER	AGTTTCTCTGGCTGGTGTTG	66

baySNP	SNP	NAME	SEQUENCE	SEQ ID NO:
12399	A55G	AR	gggacggtcggtagatTAGGGGGCTGCCAGGCTT	67
12399	A55G	GR	gctggctcggtcaagaTAGGGGGCTGCCAGGCTC	68

Please delete paragraph **[0273]** and replace it with the following rewritten paragraph:

TABLE 2b

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING PYROSEQUENCING

[0273] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for preamplification of the genomic fragments and for sequencing of the SNP using the pyrosequencing method. Bio: Biotinylated Oligonucleotide.

baySNP	NAME	SEQUENCE	SEQ ID NO:
7372	Primer F	GTGGAGCGGGAGCGAAC	69
7372	Primer R	Bio-CCCCTCAAACCGTCAG	70
7372	Seq.	GGGCATTCTCAGTGG	71
900066	Primer F	BIO-TGCCGGGAACGTGGACTAGA	72
900066	Primer R	CCGGCCTCTGTTTATGTAGTTCA	73
900066	Seq.	CTTCCCCCGCCCGGGCCCGCC	74
900073	Primer F	BIO-GGCCCCGGCTCCACGTGCTTTC	75
900073	Primer R	TGAGAACCGGCTCTGTTGGTGCG	76
900073	Seq.	CTGTGCTCTCCCTCCTCCCC	77

Please delete paragraph **[0274]**, including the heading, and replace it with the following rewritten paragraph:

~~TABLE 2d~~ **TABLE 2c**

OLIGONUCLEOTIDE PRIMERS USED FOR GENOTYPING USING TAQMAN

[0274] The baySNP number refers to an internal numbering of the PA SNPs. Primer sequences are listed for amplification of the genomic fragments. In addition the respective fluorescent hybridisation probes are listed. If not otherwise stated, all fluorescent probes have a 'minor groove binder' (MGB) attached (Kutyavin et al., ~~Nucleic Acids Research 2000,~~ NUCLEIC ACIDS RESEARCH 28:655-661 (2000)).

baySNP	F-SEQUENCE	R-SEQUENCE	VIC-MGB	FAM-MGB
1278	ACCGAGCTGGAGGGGAGTT (SEQ ID NO: 78)	CACAGCCTGGCCACCTAACA (SEQ ID NO: 80)	CAGAGCAAGCTaAGGA (SEQ ID NO: 82)	AGAGCAAGCTgAGGAG (SEQ ID NO: 84)
10771	CTGGGCCCACCGAGTTAC (SEQ ID NO: 79)	GATCTCTGTGAGTGTGCGTCTGT (SEQ ID NO: 81)	AGGAAGcGTGGCCT (SEQ ID NO: 83)	CAAGGAAGgGTGGC (SEQ ID NO: 85)